

1	BEFORE THE ARIZONA CORPORATION COMMISSION			
2 3	GARY PIERCE Chairman BOB STUMP Arizona Corporation Commission DOCKETED			
4	Commissioner DEC 1 2 2012			
5	Commissioner PAUL NEWMAN Commissioner			
6	BRENDA BURNS Commissioner			
7 8	IN THE MATTER OF THE APPLICATION) DOCKET NO. E-01891A-08-0061 AND			
9	OF GARKANE ENERGY COOPERATIVE,) E-02044A-08-0061 INC. AND DIXIE ESCALANTE RURAL)			
10	ELECTRIC FOR APPROVAL OF TIME-OF-) DECISION NO. 73620 USE RATE SCHEDULES)			
11) <u>ORDER</u>)			
12 13				
14 15	Open Meeting December 11 and 12, 2012 Phoenix, Arizona			
16	BY THE COMMISSION:			
17	<u>FINDINGS OF FACT</u>			
18	1. Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric Association			
19	are certificated to provide electric service as public service corporations in the state of Arizona.			
20	Background			
21	2. On April 15, 2009 and April 20, 2009, Garkane Energy Cooperative, Inc.			
22	("Garkane") and Dixie-Escalante Rural Electric Association ("Dixie-Escalante") filed summary			
23	findings and recommendations regarding proposed Time-of-Use ("TOU") programs for their			
24	residential customers in compliance with Decision No. 69736 dated July 30, 2007. Decision			
25	No. 70696 (January 20, 2009) granted Garkane and Dixie-Escalante a temporary waiver of the			
26	requirement that they implement optional time-based rates.			
27	3. Garkane and Dixie-Escalante currently utilize the Hunt Technologies/Landis & Gyr			
28	(L&G) TS 1 metering system. The TS 1 system limits the utilities ability to offer time-based rates			

to all of their customers because of the limited amount of information that can be sent and received. Currently they are only able to receive two register readings from the module using a commercial TS1 metering system. This means that they are unable to bill demand-based customers since the meter cannot transmit the data that are required (an on-peak and off-peak kWh and an on-peak and off-peak kW). To provide time-based rates to residential customers Garkane and Dixie-Escalante would have to install and program commercial meters since the residential meters are unable to bill time-based rates.

- 4. The companies estimate that it would cost approximately \$563-\$591 per customer to upgrade the current TS1 system to allow TOU billing, assuming 10% market penetration and 25% load shift. The cost rises to \$1,264-\$1,963 per customer if the utilities were to install the newer TS2 system. The companies also cite the load profile as reason against offering time-of-use, as the load profiles are generally very flat with no definitive peak.
- 5. On October 14, 2009, and October 20, 2009, Garkane and Dixie-Escalante filed tariffs in compliance with Decision No. 70696. Both Garkane and Dixie-Escalante use Deseret Generation and Transmission ("Deseret") as their primary supplier, which led them to use the same on-peak hours for their TOU tariffs. The proposed summer on-peak runs from 10 a.m. to 11 p.m. and includes the months from May to September. The winter on-peak runs from 6 a.m. to 11 p.m. and includes the months from October to April. Table 1.1 is a comparison of Garkane's standard rate and its proposed TOU rate. Table 1.2 is a comparison of Dixie-Escalante standard rate and its proposed TOU rate.

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Table 1.1 (Garkane)
Comparison of Standard and TOU Rates

Comparison of Standard and 100 Trates			
	Existing non-		
	TOU	Proposed TOU	
Customer Charge per			
month	\$12.50	\$13.00	
Standard rate per kWh			
(applied at all hours)	\$0.06907		
Colorado City Surcharge			
per kWh (applied to all			
hours)	\$0.037317	\$0.037317	
On-Peak rate per kWh		\$0.1129	
Off-Peak rate per kWh		\$0.0584	
		Decision No.	

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Summer Months (May-September)			
Summer On-Peak hours	10 a.m11		
(all remaining hours on-	p.m. (All		
peak)	Days)		
Winter Months (October-April)			
Summer On-Peak hours			
(all remaining hours on-	6 a.m11 p.m.		
peak)	(All Days)		

Table 1.2 (Dixie-Escalante)
Comparison of Standard and TOU Rates

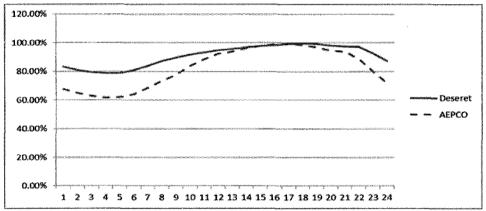
	Existing non-TOU	Proposed TOU	
Customer Charge per month	\$8.00	\$8.00	
Standard rate per kWh for first 1500 kWh's	\$0.0535		
Standard rate per kWh for all additional kWh's	\$0.0425		
On-Peak rate per kWh		\$0.0843	
Off-Peak rate per kWh		\$0.0334	
Summer Mor)		
Summer On-Peak hours (all remaining hours on-peak)		10 a.m11 p.m. (All Days)	
Winter Months (October-April)			
Summer On-Peak hours (all remaining hours on-peak)		6 a.m11 p.m. (All Days)	

Staff Analysis

6. Staff has reviewed the hourly data of Deseret that was provided by Garkane and Dixie-Escalante. Staff finds that the data supports long on-peak periods as proposed by Garkane and Dixie-Escalante. Graph 1 illustrates the typical summer load profile of Deseret and AEPCO. Deseret's load profile is atypical, when compared with AEPCO there are no distinctive valleys and peaks. This causes the need for long peak periods, which can be unattractive to many customers.

Graph 1
Comparison of Deseret and AEPCO summer load profile 73620

Graph 1
Comparison of Deseret and AEPCO summer load profile



7. Staff has also looked at the cost for Garkane and Dixie-Escalante to implement an Advanced Metering Infrastructure ("AMI"). Staff concurs with the companies on the cost of implementing AMI assuming a 10% market penetration and 25% load shift. However, Staff does not believe that Garkane and Dixie-Escalante will be able to achieve a 10% market penetration. Staff also believes the estimation of a 25% load shift is also high, due to the long peak periods that occur during the day. Table 2 illustrates the cost of upgrading the current TS1 system for TOU assuming different levels of market penetration.

Table 2
Cost per customer at different participation levels

Market	Cost per Customer	Cost per Customer
Penetration	(Dixie-Escalante)	(Garkane)
1%	\$1,037.83	\$1,316.01
2%	\$769.37	\$913.50
3%	\$683.80	\$779.34
5%	\$614.85	\$672.00
10%	\$562.85	\$591.50

8. Staff does not believe that TOU is feasible or cost-effective for Garkane or Dixie-Escalante. The cost of upgrading their current metering infrastructure to accommodate residential TOU is high, as costs range from approximately \$562 to \$1,316 per customer depending on customer participation. The load profile for Deseret, their primary generator, is also poor for TOU as it is very flat which leads to long peak periods and makes it hard for customers to shift load and in turn save money.

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ORDER

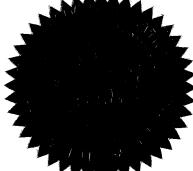
IT IS THEREFORE ORDERED that neither Garkane Energy Cooperative, Inc. nor Dixiealante Rural Electric Association offer time-of-use rate schedules at this time.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

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EXCUSED COMM. NEWMAN

COMMISSIONER



IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, day of <u>December</u>, 2012.

EXECUTIVE DIRECTOR

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DISSENT:

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Decision No. 73620

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